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## COMMON PROBLEMS CONCERNING THE USE OF THE INTERACTIVE BOARD

### Introduction

The interactive whiteboard is an electronic tool primarily designed for business presentations; the hardware connects to a standard computer and a dataprojector, and the software enables the user to create a multimedia-based presentation, which is then projected on the board and can be edited directly by touching the board with a special pen or finger (as if using a touchscreen). The potential of including the interactive board into the teaching process is still being investigated, with lots of pros and cons widely discussed. It is the purpose of this article to identify some of them, mainly in the field of interaction and motivation.

### Interaction in teaching languages

Out of the “new toys,” the interactive (white)board (IWB) has been currently the most hailed, celebrated, cursed, and disputed. Originally meant for business presentation, IWB offers undoubtedly a great advantage of combining visual and auditory materials without the need to use a set of different viewers and players. The possibility of featuring images, audio recordings and videos together with explanatory texts and comments makes any presentation more communicative and more entertaining; it is a natural next step after PowerPoint.

In the previous ten years, the discussion over IWB has periodically brought up two fundamental questions, which in my opinion have not been satisfactorily answered:

- What does it mean “interactivity” in teaching?
- Is the IWB a more effective teaching tool?

Full answers to both questions are not to be expected without extensive and long-term research, nevertheless, certain trends and directions can already be identified, which should be useful for hands-on teaching.

Let us start with the views of the teachers, as presented online. Teachers in internet discussions generally welcome IWB as a useful tool, often without specifying why they feel so eager about it:

Using the IWB, or smartboard, is the best thing that has happened to me in 15 years of teaching...<sup>1</sup>

(Of course we should not forget that teachers who contribute to internet discussions are almost certainly computer geeks and do not represent the teachers' community as a whole.)

However, the teachers are also aware of the unanswered questions in the field of interactivity:

I've been using a data projector and a computer in class for a few years now and find that the IWB might be interesting but fail to see the real difference. Can anybody please talk about this and other possible uses that are really different from just having the computer and projector.<sup>2</sup>

What is the added value brought up by the IWB? Two-year research executed in Great Britain, the results of which were published in 2006, aimed at comparing the exam results of pupils taught with or without the interactive board. Surprisingly enough, according to these data "[...] the boards are having no discernible impact on children's test scores."<sup>3</sup>

Does it mean that IWB is simply another expensive toy with no direct influence over the teaching results? We already agreed that it helps the teacher organise the lesson, get rid of the annoying piles of books, flipcharts, worksheets, CDs and cassettes. The added value in comparison with a dataprojector, though, should be found in the interactivity.

Interactivity in teaching with IWB can be seen from two different angles. The first approach omits the direct interaction among the teacher and the students; it emphasizes the role of the technology and the interaction between the student and the computer, enabled by various interfaces, e.g. pulling words from a list to their correct place in a gapped text; nevertheless, such interaction, especially when automatic feedback is included,<sup>4</sup> is still a result of preceding teacher's work, with the technology playing the moderating role. As such, this approach might be preferred in distance studies, but definitely should not replace all other ways of communication in the class.

The second approach focuses on the people involved, and presents the technology as another type of medium, a carrier wave, which enables us to share information with other people. Adopting this definition actually clears up the muddy waters of IWB use. Peter Kent bluntly says that "[...] the only interactions that matter are the ones that occur between the people in the classroom" (Kent 2010).<sup>5</sup>

Foreign languages are primarily taught for the purpose of communication; therefore, the second approach reflects the learning needs much better, and supports

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<sup>1</sup> <http://www.teachingenglish.org.uk/talk/questions/using-interactive-whiteboards>

<sup>2</sup> <http://www.teachingenglish.org.uk/talk/questions/using-interactive-whiteboards>

<sup>3</sup> <http://www.guardian.co.uk/education/2006/jun/20/elearning.technology>

<sup>4</sup> e.g. Activ Inspire offers a simple setting which returns the wrong word from the gap to its original place, and accepts only the correct one. See the keyword "Container" in Activ Inspire to learn more.

<sup>5</sup> <http://iwbrevolution.ning.com/forum/topics/what-makes-an-iwb-interactive>

the use of the interactive board as one of many available tools, with the focus on its motivating role and on presenting new information and students' products. This opinion is also strongly expressed by Thornbury (2009): "[...] if you regard learning (and learning of languages) not as simply a form of information-processing, but as a process of socially-situated and socially-mediated activity, then the delivery capability of IWBs, while impressive, is of only marginal utility."

### **Motivation or demotivation?**

Having a lesson in a classroom equipped with the attractive interactive board undoubtedly rises students' expectations and eagerness. However, this initial motivation can quickly evaporate or worse, change to demotivation, if the expectations are not met: if the students do not have a chance to use the technology themselves, if the lesson becomes tedious due to long periods of waiting (for the IWB to obey the teacher's instructions, for individual students to come to the board and perform a minor action etc.). "Grabbing the students' attention" (Stover) obviously is not enough.

In my opinion, based on twenty years of various teaching practice, generally there are three aspects which unfailingly induce intrinsic motivation: success, creativity and autonomy. How can we integrate these three factors into IWB-based lessons?

The chance to **succeed** is set by the task, and its motivational effect is adequate to the required effort. When working with interactive board, we often content ourselves with simple matching or gap filling tasks, which might be considered too simple; rising the demands and including more challenging tasks, which require e.g. using a dictionary or other sources, should also raise the students' satisfaction when they finish the task successfully.

The teacher's **creativity** is the integral part of any IWB material, and sometimes also its weakness, especially when the teacher is not aware of the opportunities the software offers. This seems to be a very sore spot when discussing the IWB specifics: we should admit that one has to be at least "computer-friendly" to actually enjoy the possibility to develop and design one's own teaching materials (not mentioning the fact that learning to work with a new software is always a very time-consuming process). What remains is the gaping need to exploit the students' creativity and their computer skills.

From the technical point of view, it is easy: after a school buys even a single IWB, both Smart and Activ (the two most frequent IWB types in the Czech Republic) offer free and legal installation of their software to all employees and all students of the institution (including their personal computers or laptops). The range of resulting possibilities is immense: from simple tasks re-designed in the class by the students (e.g. flash animations "half-baked" in Smart), through various types of homework, up to presenting own projects in the IWB formats, either in the class or online.

**Autonomy** is the hardest to achieve. As IWB was originally designed for frontal presentation, it does not primarily support the individual approach, variability and free choice of tasks; nevertheless, in combination with creativity, the IWB can promote plenty of independent students' work: from simple-decision tasks where

we e.g. offer the students a choice of images to describe at the spot, up to long-term projects.

Obviously, while exploiting the teaching and learning potential of IWB, we should also enrich our teaching approaches and the pool of tasks we offer; otherwise, the IWB remains another cute presentation tool among many.

### IWB materials design

There is no doubt that “effective use of interactive whiteboards can also support visual, auditory and kinaesthetic learning.”<sup>6</sup> Most of the materials made by teachers, though, focus on visual aspects (text and images), as if we were not sure how to integrate all learning styles and how to use all senses within one topic, one lesson.

The website [<http://veskole.cz/>] was the first (and remains the biggest) Czech site gathering teacher-made IWB materials for primary and secondary levels, and featuring all school subjects. I definitely welcome this effort, and I appreciate the work of everybody involved. Nevertheless, it should be mentioned here that the quality of the publicised materials varies a lot, and it is not so easy to discover the excellent items, hidden among the average. The majority of the English teaching materials use IWB as a presentation tool only. As mentioned above, this approach will certainly work very well – but does not require the expensive IWB hardware itself, as in such cases the teacher will cope with the IWB software and a dataprojector. Moreover, the teachers often stumble in the field of graphics and design, because they lack any appropriate training.

Common mistakes in interactive board materials design therefore include:

- Inadequate use of graphics, especially colour combinations:
  - Bright yellow should be avoided at any cost, as well as flaring background colours;
  - Overuse of animated gif’s becomes rather a nuisance than fun;
  - Funny pictures without any relation to the topic.
- General overuse of effects (colours, images, multiple font types...) “because they are here”; this seems to be a typical feature of first attempts, when the teachers discover the overwhelming amount of functions the software offers, and they cannot yet decide which of the effects will really help in teaching and learning; Image 1 shows how the background may make the text and tasks very difficult to distinguish.
- Text organisation:
  - Too much text in one slide, often unreadable due to too small font;
  - Too complex tasks featuring text only, and neglecting all other support (image/audio/video);
  - Leaving no free space for the students’ writing; such approach changes the IWB into something less than a blackboard;
  - Image 2 shows the new words being hidden behind orange rectangles; this is a very practical way of offering feedback, nevertheless, the students may need more space when trying to actually write the new word. A simple reorganisation of the slide (e.g. adding dotted lines to write the word down) would make such a task more variable.

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<sup>6</sup> [http://schools.becta.org.uk/index.php?section=tl&catcode=ss\\_tl\\_use\\_02&rid=86](http://schools.becta.org.uk/index.php?section=tl&catcode=ss_tl_use_02&rid=86)

IMAGE 1

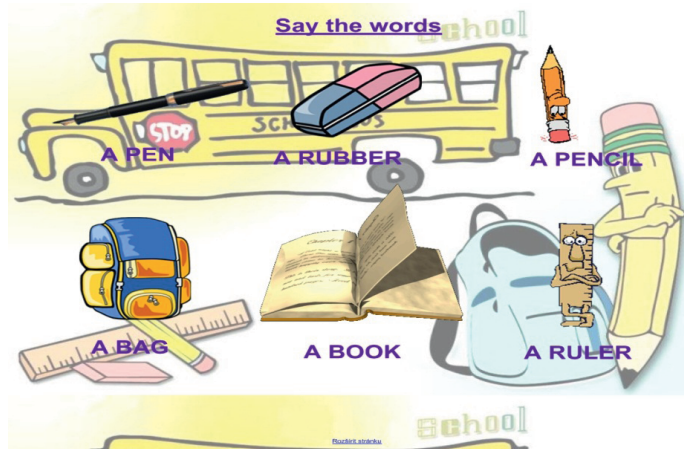


IMAGE 2



- Explanation prevails over practice: at basic level, 3 minutes of presentation should be followed by 40 minutes of practicing the new items, gradually moving from controlled to guided and free activities and language production; to achieve this, the IWB materials should include plenty of variable tasks focused on the same topic and featuring the same language material.
- Rewriting the textbook: presenting the same texts and tasks, only through a different media.
- Missing feedback (e.g. in the favourite gapfill task, the next slide should present the same text with solutions; this can be done within seconds by cloning the previous slide).
- Using the mother tongue in instructions (thus needlessly lowering the amount and intensity of target language input) and/or for translating the words: visual support seems to be more effective method than translation, especially at the primary level.

Image 3 demonstrates several serious problems within one slide: mixing L1 and L2, overusing the graphics, and, very probably, causing spelling problems due to the strong visual presentation of misspelled words.

IMAGE 3

**Find the right word**

My **strýc** is single.  
 He's the youngest **dítě** in my family.  
 I've got one older **bratr** .  
 Her **otec** is a teacher.  
 His **žena** is at home now.  
 Our **dcera** works in London.

daughter uncl waif child  
 dother uncle wife children  
 brother brather father fadher

Typical IWB activities for teaching languages include the same activities as those we can find in textbooks: categorising, matching (a word to an image or a translation), gapfill, Yes/No questions, image-based activities (description), read/listen and do tasks. Not mentioning the Flash-based games, among the activities listed above the “listen/read and do” seems to be the most creative and interactive.

Image 4 shows a simple and effective way of applying the “listen and do” principle to practice the new vocabulary. As the instructions were not included in the *.notebook* file, we can suppose they were read aloud, probably from the textbook – and naturally, the instructions can be easily modified both in form and content, offering more variability of the task.

IMAGE 4

**Follow the instructions and complete the room.**

## Conclusion

The most frequent deficiencies of the IWB materials usually result from the inadequate computer knowledge and skills of the teachers rather than their methodological (in)abilities. Nevertheless, INSETT courses focused solely on computer literacy would NOT help: what is needed is the complex view on teaching with the support of PC-based aids, including IWB. Such a course, or self-education, should focus on the ability to recognise the potential of the software and to apply this knowledge to the methodology of language teaching. In other words, even the interactive board is a useful servant, but a bad master.

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## Online IWB materials

<http://teacher.scholastic.com/whiteboards/languagearts.htm>

<http://veskole.cz/>

<http://www.amphi.com/departments/technology/whiteboard/lessonplans.html>

[http://www.kenttrustweb.org.uk/kentict/kentict\\_home.cfm](http://www.kenttrustweb.org.uk/kentict/kentict_home.cfm)

<http://www.teachingmeasures.co.uk/>

<http://www.whiteboardroom.org.uk>

## Note

For obvious reasons, the authors of the slides used in images 1–4 are not mentioned. Let me express my admiration and gratitude to all teachers who spend their free time creating IWB materials for their students, and please consider this modest text as an attempt to support and improve, rather than criticise their work.

## **Częste problemy związane z użytkowaniem tablicy interaktywnej**

### **Streszczenie**

Niniejszy artykuł przedstawia wady i zalety użycia tablicy interaktywnej w nauczaniu języków obcych. Przedstawione zostały również różne poglądy na 'interaktywność', oraz pomysły wpływania na motywację przez użycie tablicy interaktywnej. W ostatniej części ocenie zostały poddane niektóre materiały on-line przeznaczone do stosowania z użyciem tablicy interaktywnej oraz przedstawiono niebezpieczeństwa jak i korzyści związane z jej użyciem.